

Explanation of Plate XI.

Fig. 1.—*Nyctinomus Braziliensis*—back view.

Fig. 2.—Its Head—front view.

Fig. 3.—Head, seen in profile.

Fig. 4.—Side view of the Cranium.

Fig. 1, is reduced to two-thirds of the natural size.

Figures 2, 3, 4, are of the natural size.

ART. XXXI. *A Revision of the Family Equidæ.* By
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Having occasion lately to examine most of the species of this family, and being struck with the confusion that exists in the names of the species, part of which was introduced by Mr. Burchell, in his very interesting travels, I have been induced to send you a revision of it.

The older authors speak of the Horse, Mule, Onager, Ass and Zebra, the last of which, they generally describe as having the body (*corpus*) striped with black, brown, and white bands, three inches broad, but take no notice of the colour of its legs: but in Jonston's figure they are distinctly banded. They also describe, and Jonston figures several others, as the *Ethiopian Horse*, t. 3. which has very large canine teeth, the mane the whole length of the body, and the hoofs divided; it appears to be a painter's fancy. 2dly, The Indian Horse, which is banded like the Zebra, but has the mane and tail of a Horse; this is most probably only an erroneous representation of the Zebra; and 3rdly, the *Onager* with one horn; t. 6. and the *Onager* with two horns, and divided feet, the latter of which is most probably intended for the Two-horned Rhinoceros drawn from memory, and the former appears to be a fictitious animal altogether. Molina, in his History of China, speaks of the *Gnemcl* or *Hucmul*, the *Equus bisulcus* of Gmelin,

which, from his description, if it exists, is most probably a species of *Lama* (*Auchenia*.)

Edwards, in his Gleanings of Natural History, figured what he considered as the male and female Zebra, the former of which I consider to be the true Zebra, and the latter is perhaps the Quagga; but both the figures have the bands too pale, and indistinct, and the latter especially has some spots on the rump, which do not exist in the Quagga, and yet it has not the bands of the *Asinus Burchellii*.

Linneus, in his *Systema Naturæ*, described three species, the Horse, Ass, and Zebra, the latter of which he characterized, *E. fasciis fuscis versicolor*. Referring to the two figures of Edwards, and adding as a description *Color albidus seu rufescens, fasciis nigris digitos tres latis per totum corpus transversis, &c.*, I am not able to reconcile these two descriptions, but neither the Zebra nor the new species has the bands purely black, but very deep blackish brown: and Linneus certainly agreed with Edwards, in considering the two, that the latter author figured as sexes.

Pallas, in the nineteenth volume of the *New Commentaries of the Russian Academy*, adds another species, by the name of the *Equus Hemionus*, which is called *Dshikketei* by the Tartars, and which Cuvier considers to be the Wild Mule of the ancients.

Capt. Gordon sent a species of this family, called Quagga, from the Cape to Amsterdam, where it was first described and figured from his drawing in the Dutch edition of Buffon, and afterwards in the Supplement to the French editions, whence it has been described by most Zoologists.

Burchell, in his *Travels*, has taken notice of a new species, which he has for some reason called *E. Zebra*, and which he says is confined to the flat parts of Africa, and the old Zebra under the name of *E. Montanus*, as this species is found only in mountainous parts.

Le Vaillant, in his curious *Travels*, has mentioned another species under the name of *L'ane Isabelle*, (vol. iii. page —) which he says is of a plain Isabella colour, without any band; but nobody since his time, as far as I can learn, has mentioned it: may it not be an albino variety of the Zebra, or Quagga? as the

Ass is sometimes found of yellowish white, without any cross, in its domesticated state. Mr. Cross informs me, that a year or two ago, a specimen said to be of this species was brought to this country.

This family (which is distinguished from all other animals by its undivided hoof, formed of the two anterior toes, soldered together, its simple stomach, and its female having the teat placed on the pubes,*) may be divided into two very distinct types of form; the one the Asses and Zebras, which are always whitish and more or less banded with blackish brown, and always have a distinct dorsal line, the tail only bristly at the end, and have warts only on the arms, and none on the hind legs; and the true Horses, which are not banded, have no dorsal line, are furnished with warts† on their arms and legs, and have long hair on the tail, from its insertion to its extremity.

Family EQUIDÆ.

Solidungulæ. Antiquorum, *Cuvier*, &c. *Genus. Equus Lin.*

Dentes Incisores, $\frac{6}{6}$ canini (mares) $\frac{1.1}{1.1}$ molares $\frac{6.6}{6.6} = 40.$

Pedes unguâ indivisâ.

Genus I. EQUUS. The *Horse.*

Caudâ undique vetosâ, lineâ dorsali nullâ, verrucis brachiorum pedumque distinctis.

1. *E. Caballus*, the Common Horse.

E. infasciatus.

Equus Caballus. Lin. Syst. Nat. j. 100.

Equus Antiquorum. Gesner, Quad. 132.

Cheval. Buff. Hist. iv. 1.

Horse. Bewick, Quad. p. 1. Generous Horse. Pennant.

* Linneus observes that *mares mammas non habent*, which is not the fact, for he ought to have said *mares mammas prepucciales habent*.

† These were formerly used in medicine, and were enumerated with the drugs in the London Pharmacopœia till 1745, under the name of *Verrucæ pedum Equinorum*.—See Gray's Pharmacology, edit. 3. p. 161.

Icon. *Jonston, Quad.* t. 1, 2, 3, 4. *Buffon* iv. t. 1. *Shaw, Zool.* ii. t. 214, 215. *Bewick, Quad.* p. 1.

β. Sylvestris.

Wilde Pferde. *J. G. Gmelin II.* j. 221. ii. 510.

Takija, or Wild Horses. *Bell Trav.* j. 225.

Inhabits Tartary, but has been transported by Man to most of the other parts of the world, both of the old and new continent. *Mus. Brit.*

This species has very numerous varieties which are interesting to study, but very difficult to characterize, and Mr. Huzard is at present illustrating them with lithographic plates.

Genus II. ASINUS.

Caudâ apice setosâ, lineâ dorsali distinctâ, ornatâ, verrucis brachiorum distinctis, pedum nullis.

Sp. 1. *Asinus Hemionus.* The Dshikketei (Zikketei.)

A. fulvo-fuscus, jubâ, caudâ, lineâ dorsalique nigris.

Equus Hemionus. *Pallas, Nov. Comm. Petrop.* xix. 394.

Equus Hemionos. *Bodd.*

Hemionos. *Plin. Hist. Nat.* viii. c. 44.

Dshikketei. *Pennant, Quad.* 4. 2. Yototse. Chinese. Dziggethai. *Buff. Sup.* vi. p. 37. L'Dziggetai. *Cuv. Regn. Anim.* j. 244. L'Hemione. *Ency. Method.*

Wild Mule, Half Ass or Fecund Mule. *Pennant, Quad.* Jickta. *Shaw,* ii. 427.

Icon. *Pallas. Nov. Comm.* 1. c. t. 7. *Neue Nord. Betyr.* ii. t. 1. *Ency. Method.* t. 43. f. 4. copied.

Inhabits the Desert of Mangol, on the borders of China and Thibet. *Pallas.*

Description. Shape of the Mule, head and ears large; fur Isabella yellow, mane, tail, and dorsal line black, the hair of the winter coat very long; of the summer, short.

Sp. 2. *Asinus vulgaris.* The Ass.

A. cinereus, lineâ dorsali et transversali scapularum nigris.

Equus asinus. *Lin. Sys. Nat.* j. 101.

Equus asina. *Fleming, Phil. Zool.* ii.

Asinus Gesn. Quad. 40.

Ass. Bewick, Quad. 19. *L'Ane Buff. Hist. Nat.* iv. xi.

Icon. Jonston, Quad. t. 6. *Buffon, iv. t. 11. Ency. Method.* t. 14. f. 1, 2.

β. *Sylvestris.* Major, auriculis brevioribus erectis.

Onager, Wild Ass, antiquorum. Ray, Quad. 6. 3.

Onagus. Gesn. Quad. 19.

Equus Onager. Bris. Reg. Anim. 104.

Wild Ass. Bell, Trav. j. 212. *Koulán, or Wild Ass. Pen-
nant Quad.*

γ. *Albida.* Albida, non fasciata.

1. *Mulus, ex Equâ et Asino. Mule. Bewick Quad.* 16.

Mulus. Ray, Quad. 64.

Icon. Jonston, Quad. t. 6. *Ency. Method.* t. 44. f. 3.

2. *Hinnus, ex Asinâ et Equo.*

Hinnus. Ray, Quad. 64.

3. *Fasciata, ex Zebrâ et Asino.*

*Inhabits Tartary, in the wild state; but man has domesticated it
to most parts of the world.*

Description. Head and ears long. Fur gray, lower part whitish,
with a black dorsal line, and a band across the scapulæ, end of the
ears black.

The wild Asses, or Onagers, are larger, and the ears are shorter
than the domestic variety, which varies in size and form according
to the climate; the white variety is an albino, as the eyes are red.
Their voice is called braying. The hybrid bred between the
male Ass, and a mare is called a Mule; it has more the general
form and size of the mare, with the large head, long ears, and
nearly naked tail of the Ass. That bred between the Horse and
the Ass is called a Hinny; this animal is generally of a smaller
size than the Mule, and has a smaller head, shorter ears, and more
hairy tail, but its form is like that of the Ass. Thirdly, that be-
tween the Zebra and a male Ass, is called the *Ribbon-legged Ass*;
it is grayish, with black bands on the outer face of the legs, and
has a black line across the shoulders, with the form of the Ass:
all these varieties are barren, according to the accounts of authors.

Sp. 3. *Asinus Quagga*. The Quagga.

A. capite, nuchâ, scapulisque nigris albido-fasciatis, dorso fuscescente subfasciato, lineâ dorsali nigrâ albido-marginatâ, caudâ artubusque albidis.

Equus Quagga. Gmelin.

Le Congga. Cuvier. *Reg. Anim.* 245.

Zebra fœmina, &c. Edw. *Glean.* j. 29?

Opeagha, or Quagga, of the Hottentots. Masson. *Trav. Phil. Trans.* lxxvi. 297.

Quacha. Pen. *Quad.* 14. Female Zebra. Edw. *Glean.* j. 29?

Le Couagga. G. Cuvier, Menag.

Icon. Edw. *Glean.* t. 223? bands too distinct, and no marks on the rump. Shaw. *Zool.* t. 218? copied Edw. G. Cuvier, Menag. t. — *Ency. Method. Suppl.* t. 13. f. 1. F. Cuvier. Menag. t. —

1. Junior. E, capite, et nuchâ, fuscis albido-fasciatis, corpore superne fusco, lineâ dorsali bruneâ notato, ventre artubusque albidis, unguis nigris, supra annullis fuscis notatis.

Kwagga or Couagga. Buff. *Suppl.* vi. p. 85.

Icon. Buffon *Suppl.* vi. t. 7.

Inhabits Africa, near the Cape of Good Hope, v. v. Mus. Cross. 1. Mus. Brit.

Less than the Zebra, with the hinder parts higher, and the ears shorter. Fur of the head, neck, mane, and shoulders, blackish brown, banded with white, the ground colour gradually becoming paler, and the bands less distinct, and diffused as we proceed along the back till it is greyish on the rump; the dorsal line is black, margined on each side with a white line. Belly, tail, and legs white; ears with two irregular black bands and white tip.

The young is pale brown, with the mane, a few scattered spots, and the dorsal line of a deeper colour, the latter of which is slightly extended down the tail. The belly and legs whitish grey, with a dark ring just above the hoof. The forehead, cheeks, neck, and mane marked with narrow transverse whitish bands, which are visible in peculiar positions on the back also.

This animal lives in troops, never intermixing with the Zebras. According to Capt. Gordon, they are used by the natives for the purpose of draught; but as Buffon very justly observes, it is cu-

